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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/309,130	05/10/99	RAKAUSKAS	28572/32531A

IM22/0808
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EXAMINER

KRUER, K

ART UNIT	PAPER NUMBER
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1773

13

DATE MAILED: 08/08/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/309,130

Applicant(s)
Rakauskas

Examiner
Kevin Krueer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 1, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14 and 17-54 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14 and 17-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 37, 42, and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Hsu et al. (US 4,822,440). Hsu teaches a wood product comprising crossbands on either side of the core, and face veneers attached to both crossbands. The crossbands are used to prevent checking and splitting of face veneers (col 1, lines 8-19), and comprise a kraft paper ply (dried to a moisture content of 2-4%) (col 1, lines 50-61) impregnated with an adhesive (col 1, line 68). Adhesives include melamine formaldehyde condensation resins (col 2, line 1), urea formaldehyde, polyvinyl acetate(col 3, lines 8-10), and phenolic resins (col 4, line 3). Such sheets are usually saturated (see '236, col 1, line 33).

3. Claims 38-41 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Hsu et al. (US 4,822,440), as applied to claims 37, 42, and 48 above. Hsu is relied upon as above. Hsu does not teach the claimed process limitations. However, process limitations do not patentably distinguish a claimed product claim from a product taught in the prior art unless the process claims inherently result in a materially different product. In the event any differences can be shown for the product of the product by process

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claims, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product taught in the absence of a showing of unexpected results.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (US 4,822,440), as applied to claims 37, 42, and 48 above, and further in view of Brooker et al. (US 5,723,221). Hsu is relied upon as above, but doesn't teach that the resin should comprise about 98wt% melamine. However, Brooker teaches that it is well known in the art to utilize melamine aldehyde resins to saturate paper sheets utilized in high or low pressure processes. To the melamine resin may be added a variety of fillers (col 2, lines 8+). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising 98wt% melamine and 2wt% other fillers because such compositions are taught by Brooker to be useful adhesives.

Hsu also does not admit that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as

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to advantageously effect the adhesion of the laminate. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 f.2d 456, 105 USPQ 233, 235, (CCPA 1955). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any combination in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

6. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (US 4,822,440), as applied to claims 37, 42, and 48 above, and further in view of Guyette (US 5,425,986). McClain is relied upon as above, but doesn't teach that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

7. Claim 47 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (US 4,822,440), as applied to claims 37, 42, and 48 above, and further in view of Guyette (US 5,425,986). Hsu is relied upon as above, but none of the references teach that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high pressure laminate comprising a fiberboard core, and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract).

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Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate taught by Hsu, because Guyette teaches that kraft paper with such weights are porous enough and strong enough to be used as intermediate resin impregnated sheets in wood composite laminates.

8. Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (US 4,822,440), as applied above. Hsu is relied upon as above, but doesn't teach the preferred moisture content of the veneer. However, it is well known in the art to decrease the moisture content of a wood veneer to prevent warping. Further, the lower the moisture content is decreased, the more expensive the manufacturing costs. Section 2144.05(b) of the MPEP states: a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. '{W}here the general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.' In re Aller, 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the moisture content of the veneer in order to minimize warping and costs.

9. Claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of Hsu et al. (US 4,822,440) and McClain (US 1,299,747). Baymiller teaches a veneered or laminated board structure comprising a wood core, a crossbanding material and a wood veneer (abstract). The core stock may comprise, for example, lumber or chip board (col 1, line 13). The crossbanding material

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comprises a resin saturated sheet. The laminate has considerable dimensional stability and resists warping and cracking of the veneer.

Baymiller teaches a laminate comprising a crossbanding material between a wood core and veneer, but does not that the crossband should comprise a resin saturated kraft paper. However, Hsu teaches a crossbanding material used to prevent checking and splitting of face veneers (col 1, lines 8-19). The crossbanding material comprises a kraft paper ply (dried to a moisture content of 2-4%) (col 1, lines 50-61) impregnated with an adhesive (col 1, line 68). Adhesives include melamine formaldehyde condensation resins (col 2, line 1), urea formaldehyde, polyvinyl acetate(col 3, lines 8-10), and phenolic resins (col 4, line 3). Such sheets are usually saturated (see '236, col 1, line 33). The courts have held the selection of a known material based on its suitability for its intended use supported a prima facie case of obviousness. *Sinclair & Carroll Co. V. Interchemical Corp.* 325 U.S. 327, 65 USPQ 297 (1945). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the crossbanding material taught in Hsu in place of the crossbanding material taught in Baymiller because they prevent checking and splitting of face veneers, and are cheaper, thinner, and because the kraft paper crossbands easier to handle than porous felt crossbands.

Baymiller also does not teach that a saturated resin sheet should be applied to the non-veneered surface of the substrate. However, McClain teaches that saturated paper products may be applied to the non-veneered surface of a wood laminate in order to provide moisture, oil and acid resistance (col 4, lines 115+). Therefore, it would have been obvious to one of ordinary skill

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in the art to apply a resin saturated paper sheet to the non-veneered surface of the laminate taught in Baymiller in order to provide oil, water, and acid resistance.

The limitations of claims 26-29, 38-41, 52, and 54 are process limitations. Process limitations do not patentably distinguish a product claim from a product taught in the prior art unless applicant can show that the method of making the claimed product inherently results in a product that is different from the teachings of the prior art. In the present application, no such showing has been made.

10. Claims 23, 35, and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of Hsu et al. (US 4,822,440) and McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Baymiller in view of Hsu and McClain is relied upon as above, but none of the references teach that the resin coated paper sheet should have a basis weight of about 40 pounds per ream to about 100 pounds per ream. However, Guyette teaches a high pressure laminate comprising a fiberboard core, and intermediate resin impregnated paper sheet or lamina, and a decorative paper or lamina (abstract). Guyette teaches that the intermediate resin impregnated paper should comprise a kraft paper having a weight of 25 to about 400 grams per square meter (col 3, lines 53-58). It would have been obvious to one of ordinary skill in the art to utilize a kraft paper with a weight of 25-400 grams per square meter as the resin coated paper of the laminate taught by Baymiller, because Guyette teaches that kraft paper with such weights are porous enough and strong enough to be used as intermediate resin impregnated sheets in wood composite laminates.

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11. Claims 22, 34, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of Hsu et al. (US 4,822,440) and McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Guyette (US 5,425,986). Baymiller in view of McClain and Hsu is relied upon as above, but none of the references teaches that the resin should comprise about 45-65wt.% of the resin-saturated sheet. However, Guyette teaches that the resin in the resin impregnated intermediate sheet should comprise 5 to 75 percent by weight of the resin impregnated intermediate sheet. Therefore, it would have been obvious to one of ordinary skill in the art to utilize a resin-saturated sheet comprising 5-75wt.% resin because Guyette teaches that sheets comprising 5-75wt% resin exhibit sufficient adhesion to the surrounding substrates when utilized as intermediate layers in wood composite laminates.

12. Claims 18-21, 30-33, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of Hsu et al. (US 4,822,440) and McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above, and further in view of Brooker et al. (US 5,723,221). Baymiller in view of Hsu and McClain is relied upon as above, but none of the references teach that the resin should comprise about 98wt% melamine. However, Brooker teaches that it is well known in the art to utilize melamine aldehyde resins to saturate paper sheets utilized in high or low pressure processes. To the melamine resin may be added a variety of fillers (col 2, lines 8+). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize a resin composition comprising

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98wt% melamine and 2wt% other fillers because such compositions are taught by Brooker to be useful adhesives.

Baymiller also does not admit that the adhesive resin may be a melamine/urea blend. However, Brooker teaches that urea-formaldehyde may be advantageously added discreetly or in combination with the melamine resin for use as an adhesive in both high and low pressure decorative laminates (col 3, lines 3+). Thus, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to blend urea and melamine resins in such a way as to advantageously effect the adhesion of the laminate. The courts have held that when the general conditions of a claim are known in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller*, 220 f.2d 456, 105 USPQ 233, 235, (CCPA 1955). Therefore, the examiner takes the position that it would have been obvious to one of ordinary skill in the art to utilize the melamine and urea in any combination in order to optimize adhesion, reduce shrink, and optimize processing time and costs.

13. Claims 25 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baymiller (US 3,816,236) in view of Hsu et al. (US 4,822,440) and McClain (US 1,299,747), as applied to claims 14, 17, 24, 26-29, 36-41, 48, and 50-54 above. Baymiller in view of McClain and Hsu is relied upon as above. None of the references teach the preferred moisture content of the veneer. However, it is well known in the art to decrease the moisture content of a wood veneer to prevent warping. Further, the lower the moisture content is decreased, the more expensive the manufacturing costs. Section 2144.05(b) of the MPEP states:

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a difference in concentrations or temperatures will not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such concentration or temperature is critical. ‘{W}here the general conditions of a claim are disclosed in the prior art it is not inventive to discover the optimum or workable ranges by routine experimentation.’ In re Aller , 220, F.2nd 454, 105 USPQ 233, 235 (CCPA 1955).

Therefore, it would have been obvious to one of ordinary skill in the art to optimize the moisture content of the veneer in order to minimize warping and costs.

Response to Arguments

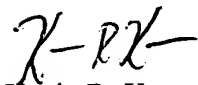
14. Applicant's arguments with respect to claims 14 and 17-54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

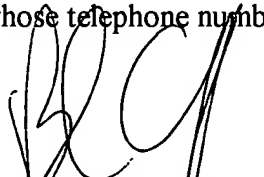
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin R. Kruer whose telephone number is (703) 305-0025. The examiner can normally be reached on Monday-Friday from 7:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver, can be reached on (703) 308-1261. The fax phone number for the organization where this application or proceeding is assigned is (703)305-5436.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0651.



Kevin R. Kruer
Patent Examiner



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